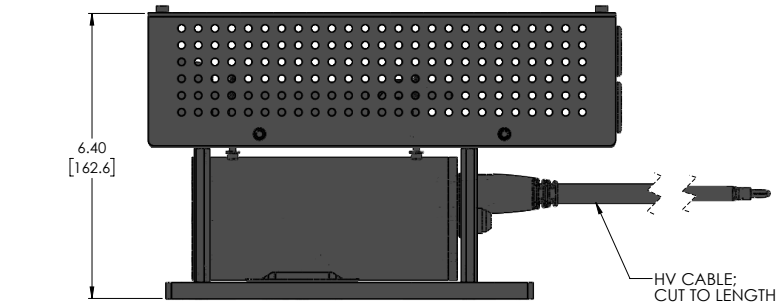
MICRO X-RAY INC.

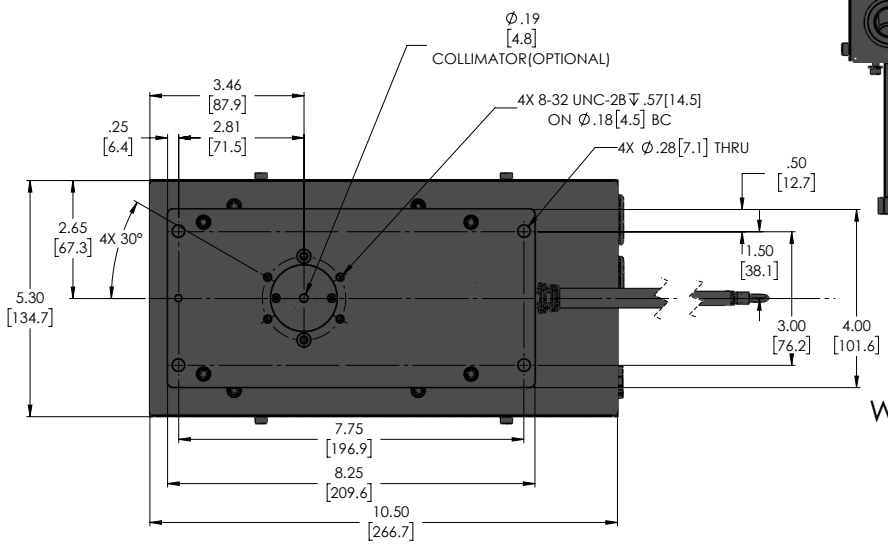
AQUACHILL

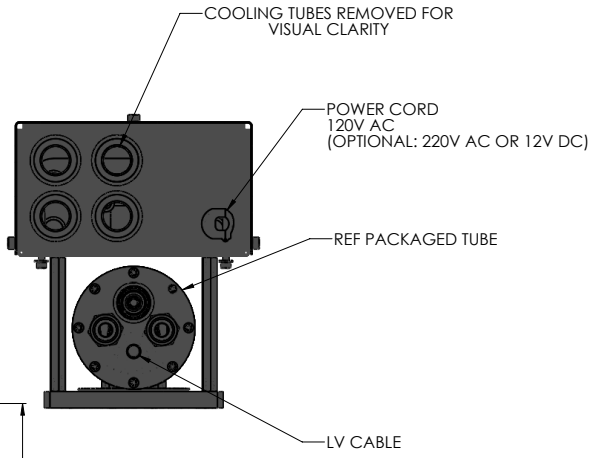
*The **Aquachill** is an actively cooled X-Ray source that combines MXR's Packaged X-ray Tube with a chilled water heat exchangers to allow for maximum power tube settings in challenging environments. This product includes high voltage cable, filament cable, and power plug. Power supply available upon request.*

Features include:

- **Maintains internal oil temperatures at safe levels** in elevated ambient conditions.
- **Extends environmental operating range** of the X-ray source.
- **Plug and play operation.**







WIDE ANGLE OPTION UPON REQUEST

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AQUACHILL

AQUACHILL SPECIFICATIONS

Max. Power	100W
Max. Voltage	60kV
Pump/Fan Input Power	120/220VAC or 12/24VDC
Water Pressure	Up to 250-290psi
Coolant	Recommended: Di Water, Ethelyne Glycol 30%, Benzotiazole 1%[1]
Flow Rate	5L/min
Pump/Fan Cable Length	1m
Weight	12lbs
Safety	Thermal Switch[2]

[1] *Confirm with chiller manufacturer's recommendations.*
[2] *Shuts off device when internal temperatures reach 70˚C.*

PACKAGED TUBE SPECIFICATIONS

Polarity	Grounded Cathode
Flange Type	(6) 8-32 thread
Max. Voltage	60kV[1]
Max. Power	75W[2]
Max. Filament Current	1.7A, 2.0A[2]
Anode Current	2mA for 1.7A filament 5mA for 2.0A filament
Beam Angle	25˚, 40˚
Focal Spot	50µm ±50% Tolerance
Window Thickness	127µm[3]
Target Material	Mo, W, Rh, Cu[4]
Cooling	Air cooled, 150 CFM fan recommended

[1] *Refer to Figure 1 and 2 to determine optimal operational parameters.*
[2] *Information about 2.0A filament option can be found at https://microxray.com.*
[3] *More window options available upon request.*
[4] *Other target materials available upon request.*

GENERAL

The customer is responsible for controlling the high voltage and filament current and designing the cooling system. Selecting an appropriate power supply is crucial to protect the X-ray tube from overcurrent and overvoltage. Sufficient cooling is required when operating the X-ray tube. Failure to do so may damage the tube and radiation protection, posing a hazard.

FIGURE 1 *- 1.7mA Filament*

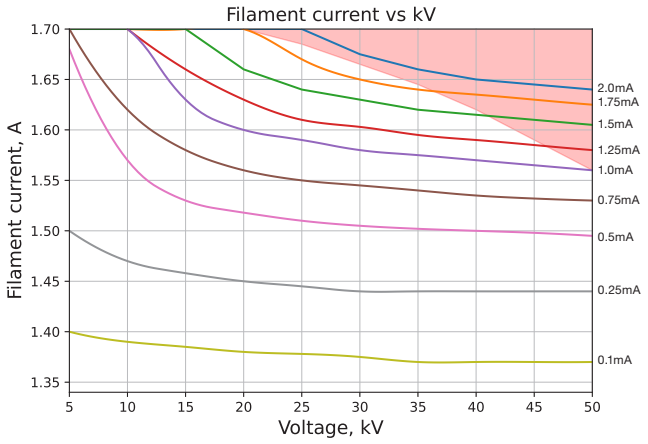
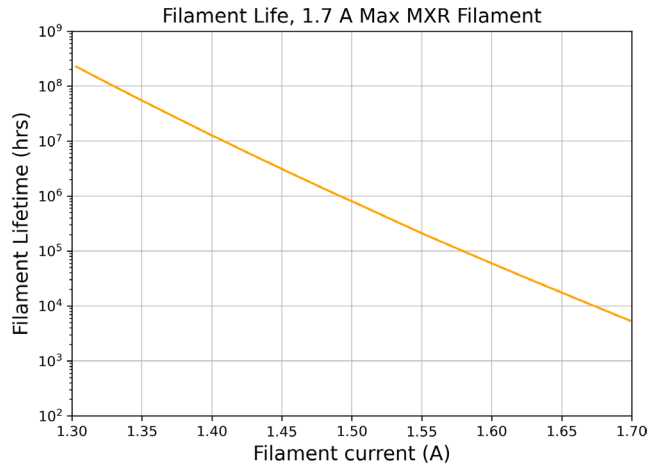


FIGURE 2



RADIATION PROTECTION

The customer is responsible for radiation protection and must ensure compliance with local regulatory requirements and limit values.

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